UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

ECOLOGICAL SITE DESCRIPTION

ECOLOGICAL SITE CHARACTERISTICS

Site Type: Forest
Site ID: F039XC002NM
Site Name: *Pinus ponderosa*
Major Land Resource Area and Common Resource Area MLRA 39 CRA NM 3
Precipitation or Climate Zone: Southcentral New Mexico Mountains 16 – 30”
Phase:

ORIGINAL SITE DESCRIPTION APPROVAL:

Site Date: August 6, 2002
Site Author: Steve Lacy
Site Approval:
Approval Date:

REVISIONS:

Revision Date:
Revisor:
Revision Approval:
Approval Date:
Revision Notes:

PHYSIOGRAPHIC FEATURES

Narrative:

The Ponderosa pine community is found from 6,500 – 8,000 feet. The Ponderosa forest occupies mountain slopes, especially south and west facing slopes at higher elevations.

LAND FORM:

1. mountain slopes
2.
3.

ASPECT:

1.
2.
3.

	Minimum	Maximum
Elevation (feet)	6,500	8,000
Slope (percent)		
Water Table Depth (inches)		

Flooding:	Minimum	Maximum
Frequency		
Duration		

Ponding:	Minimum	Maximum
Depth (inches)		
Frequency		
Duration		

Runoff Class:

CLIMATIC FEATURES

Narrative:

The Sacramento mountains receive the majority of its annual moisture during the summer monsoon season. Winter snowfall contributes significant additional moisture.

	Minimum	Maximum
Frost-free period (days):	80	145
Freeze-free period (days):		
Mean annual precipitation (inches):	16”	30”

Monthly moisture (inches) and temperature (^{0}F) distribution:

	Avg. Precip. Min.	Avg. Snowfall Total	Temp. Min.	Temp. Max.
January	1.15	9.4	17.8	49.2
February	1.11	7.8	19.4	51.9
March	1.17	6.9	23.1	57.1
April	0.69	2.3	28.2	65.2
May	0.91	0.1	34.6	73.7
June	2.05	-	42.2	81.8
July	3.99	-	48.0	81.3
August	4.19	-	47.3	79.4
September	2.48	-	41.0	75.3
October	1.56	1.4	31.2	66.7
November	0.83	3.3	22.5	57.1
December	1.61	8.8	18.2	50.5

Climate Stations:

			Lat	**Long**		**Period**		
Station ID	Ruidosa 2 NNE	Location	3322	10540	From:	1946	To:	2000
Station ID		Location			From:		To:	
Station ID		Location			From:		To:	
Station ID		Location			From:		To:	
Station ID		Location			From:		To:	

INFLUENCING WATER FEATURES

Narrative:

Wetland description:

System	Subsystem	Class

If Riverine Wetland System enter Rosgen Stream Type:

REPRESENTATIVE SOIL FEATURES

Narrative:

Parent Material Kind: _____

Parent Material Origin: _____

Surface Texture:

1.
2.
3.

Surface Texture Modifier:

1.
2.
3.

Subsurface Texture Group: _____

Surface Fragments <=3" (% Cover): _____

Surface Fragments >3" (% Cover): _____

Subsurface Fragments <=3" (%Volume): _____

Subsurface Fragments >=3" (%Volume): _____

	Minimum	Maximum
Drainage Class:		
Permeability Class:		
Depth (inches):		
Electrical Conductivity (mmhos/cm):		
Sodium Absorption Ratio:		
Soil Reaction (1:1 Water):		
Soil Reaction (0.1M CaCl2):		
Available Water Capacity (inches):		
Calcium Carbonate Equivalent (percent):		

Soil survey associations:
This ecological site is associated with the map units and soil components in the following soil surveys. Future updates to this soil survey may affect these associations. For up-to-date associations between soil components and this ecological site, refer to NASIS. Associations between ecological sites and soil components are maintained in NASIS via the ecological site ID.

MAP UNIT NAME

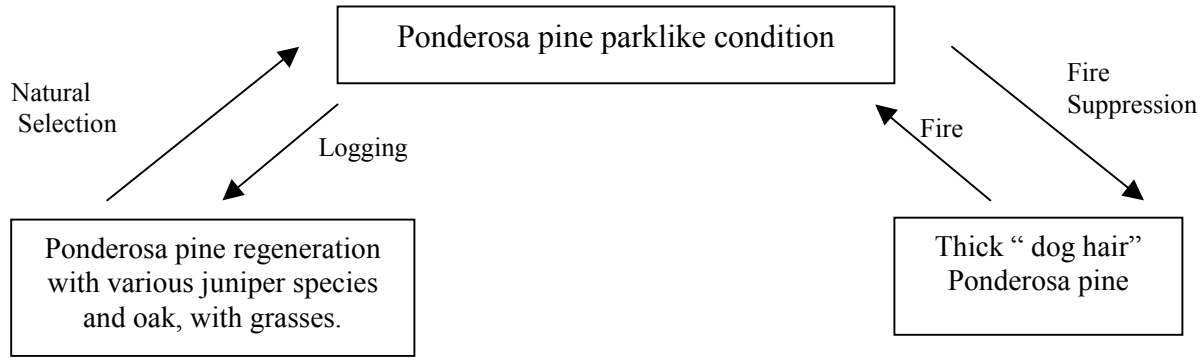
Soil survey	Map unit symbol	Soil components

PLANT COMMUNITIES

Ecological Dynamics of the Site:

The Ponderosa pine forest is the lowest elevation forest of the true forest zone. The elevation of this forest ranges from 6,500 – 8,000 feet. The forest is found in areas of moderate moisture but also occupies areas of relatively dry and sandy soil. The forest may consist of widely scattered individuals, or grow in parklike stands on dry hillsides and plateaus. On cooler northern slopes the stands are thicker and may include Douglas fir. At lower elevations, juniper trees may be present.

Plant Communities and Transitional Pathways (diagram)



Interpretive Plant Community: Naturalized Plant Community

Ground Cover and Structure:

Cover Type	Percent Ground Cover by Height Class (feet)								
	<.5	.5-1	>1-2	>2-4.5	>4.5-13	>13-40	>40-80	>80-120	>120
Grass/Grass Like									
Forb									
Shrub/Vine									
Tree									
Lichen									
Moss									
Litter									
Course Fragment									
Bare Ground									

Forest Overstory Composition:

The typical forest overstory composition of the historic climax community.

Common Name	**Scientific Name**	**Percent Composition (percent by frequency)**
Ponderosa pine	*Pinus ponderosa*	
Douglas fir	*Pseudotsuga menziesii*	
Rocky Mountain juniper	*Juniperus scopulorum*	
One–seed juniper	*Juniperus monosperma*	

Forest Understory Composition:

The typical annual production of understory species to a height of 4.5 feet (excluding boles of trees) under low, high, and representative canopy covers.

		Annual Production Per Acre Percent and Pounds (air-dry weight)					
		Canopy Cover Percent					
		80		**90**		**100**	
Common Name	**Scientific Name**	%	lbs	%	lbs	%	lbs
Gambel oak	*Quercus gambelii*						

Typical Climax Community:

Large scattered Ponderosa pines scattered in a parklike setting or mountainous slopes.

Plant Community: (as it exists today)

Young to medium–aged Ponderosa pines with a strong Gambel oak component.

Ground Cover and Structure:

	Percent Ground Cover by Height Class (feet)								
Cover Type	<.5	.5-1	>1-2	>2-4.5	>4.5-13	>13-40	>40-80	>80-120	>120
Grass/Grass Like									
Forb									
Shrub/Vine									
Tree									
Lichen									
Moss									
Litter									
Course Fragment									
Bare Ground									

Forest Overstory Composition:

The typical forest overstory composition of the historic climax community.

Common Name	Scientific Name	Percent Composition (percent by frequency)
Ponderosa pine	*Pinus ponderosa*	
Total		

Forest Understory Composition:

The typical annual production of understory species to a height of 4.5 feet (excluding boles of trees) under low, high, and representative canopy covers.

		Annual Production Per Acre Percent and Pounds (air-dry weight)					
		Canopy Cover Percent					
		75		85		95	
Common Name	Scientific Name	%	lbs	%	lbs	%	lbs
Rocky Mountain juniper	*Juniperus scopulorum*						
Gambel oak	*Quercus gambelii*						
One seed juniper	*Juniperus monosperma*						
Total Annual Production							

Plant Community: (as it exists today)

ECOLOGICAL SITE INTERPRETATIONS

Forest Site Productivity

		Annual Productivity (per acre per year)						
		Site Index		Cubic Feet (CMAI)		Other Units		
Common Name	**Scientific Name**	Low	High	Low	High	Low	High	Unit
Ponderosa pine	*Pinus ponderosa*							

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		Map Unit Name
Soil Survey	Map Unit Symbol	Soil Components

ECOLOGICAL SITE INTERPRETATIONS

Animal Community:

Ponderosa forest species include elk, deer, black bear, mountain lion and squirrels.

Plant Preference by Animal Kind:

Animal Kind: _____

Animal Type: _____

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D

Animal Kind: _____

Animal Type: _____

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D

Hydrology Functions:

A healthy Ponderosa forest will have a duff layer that will lessen the impact of heavy rain and aid in the infiltration of runoff.

Recreational Uses:

1. Camping
2. Hiking
3. Hunting

Wood Products:

Saw logs, vigas, etc. This is the most important economic forest zone in the southwest.

Other Products:

Other Information:

Supporting Information

Associated Sites:

Site Name	Site ID	Site Narrative

Similar Sites:

Site Name	Site ID	Site Narrative

Inventory Data References (narrative):

Inventory Data References:

Data Source	Number of Records	Sample Period	State	County

State Correlation:
This site has been correlated with the following sites: _____

Type Locality:
State: New Mexico
County: Lincoln
Latitude: _____
Longitude: _____
Township: _____
Range: _____
Section: _____

Is the type locality sensitive? Yes ☐ No ☐

General Legal Description: _____

Relationship to Other Established Classifications:

Other References: